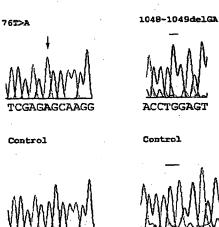
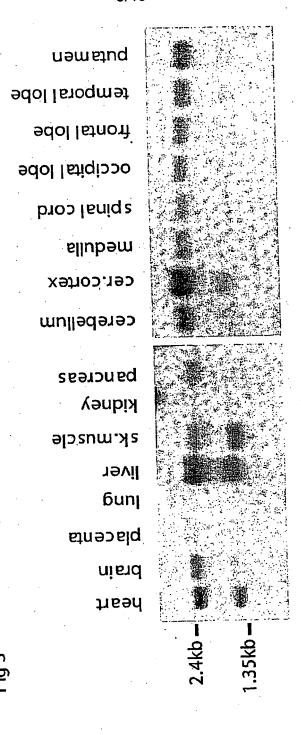
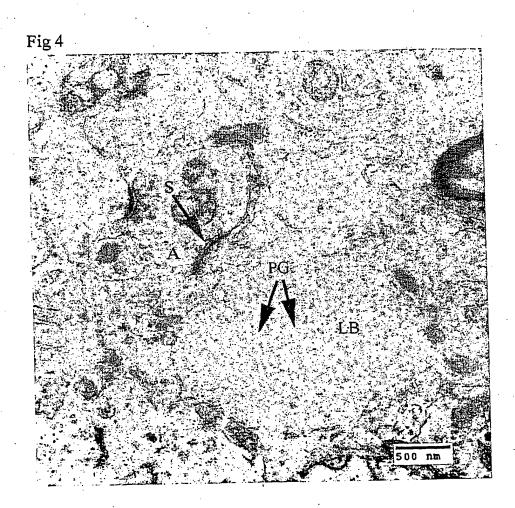


Fig 2b







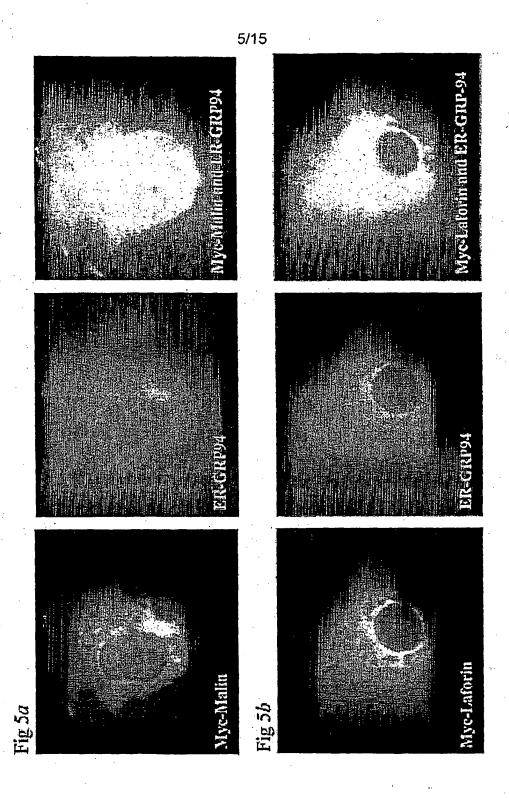


Fig 6A

1 atggcggccg aagcctcgga gagcgggcca gcgctgcatg agctcatgcg cgaggcggag 61 atcagcetge tegagtgeaa ggtgtgettt gagaagtttg gecaceggea geageggege 121 ccgcgcaacc tgtcctgcgg ccacgtggtc tgcctggcct gcgtggccgc cctggcgcac 181 ccgcgcactc tggccctcga gtgcccattc tgcaggcgag cttgccgggg ctgcgacacc 241 agcgactgcc tgccggtgct gcacctcata gagctcctgg gctcagcgct tcgccagtcc 301 ccggccgccc atcgcgccgc ccccagcgcc cccggagccc tcacctgcca ccacaccttc 361 ggcggctggg ggaccctggt caaccccacc ggactggcgc tttgtcccaa gacggggcgt 421 gtcgtggtgg tgcacgacgg caggaggcgt gtcaagattt ttgactcagg gggaggatgc 481 gcgcatcagt ttggagagaa gggggacgct gcccaagaca ttaggtaccc tgtggatgtc 541 accatcacca acgaetgeca tgtggttgtc actgaegecg gegategetc catcaaagtg 601 tttgattttt ttggccagat caagcttgtc attggaggcc aattctcctt accttggggt 661 gtggagacca cccctcagaa tgggattgtg gtaactgatg cggaggcagg gtccctgcac 721 ctcctggacg tcgacttcgc ggaaggggtc cttcggagaa ctgaaaggtt gcaagctcat 781 ctgtgcaatc cccgaggggt ggcagtgtct tggctcaccg gggccattgc ggtcctggag 841 cacccctgg ccctggggac tggggtttgc agcaccaggg tgaaagtgtt tagctcaagt 901 atgcagettg teggecaagt ggatacettt gggetgagee tetaetttee etecaaaata 961 actgcctccg ctgtgacctt tgatcaccag ggaaatgtga ttgttgcaga tacatctggt 1021 ccagctatec tttgettagg aaaacetgag gagtttecag tacegaagee catggteact 1081 catggtettt egeateetgt ggetettace tteaceaagg agaattetet tettgtgetg 1141 gacacagcat ctcattctat aaaagtctat aaagttgact gggggtgatg ggctggggtg 1201 ggtccctgga atcagaagca ctagtgctgc cattaatgaa ttgtttaacc ctggataagt 1261 cacttaaact catctatcca ggcagggata attaaaacca tctggcagac ttacaaagct 1321 tgggacagtt attggagatt aatctaccat ttattgaatg catactctgt gcaaggaaat 1381 ttgcaaatat tagcttattt aatctgtact atccagtgag gtaatttctt cccccccaag 1441 atagagtcaa getetgteac ecaggetgga gtgcagaage atgateacag etcaetacag

Fig 6A (cont'd)

1501 tttcaacgte ccccgctcag gtggtccttc cacctcagce tcccaagtag ctgggaccac
1561 aagtgtgcat taccacacte agetaattt tgtattttgg cagagatggg gtttcaccat
1621 gttgcccagg ctggtctcaa actcctgagt tcaagcaate caccttcete ggcctcccaa
1681 agtactagga gtacaggcat agccacttge tcagccataa tttttattat taatctcatt
1741 gtacaagtga gaaaactgag acccagagag cttaagtgac ttcctcgagg tcatagttac
1801 ttactgcctt agtcccaatt tgaattcaat tctgattcca aataagttge gcttaaataa
1861 gacaacagat gtgggaaaaa tatgtgaatg tgtagtgttg ctatgtgtac tgtctttaca
1921 agtagctaat tatttagca caaagatgtg caaagaaagg agactttatg gagagttcag
1981 gagaaaaagg attttgtggt ggccatcact ttcattcaat ttgcgactgc tctgatggca
2041 cattagatga agttactgtt gatcctgagt tacgtgaata agaaaaacaa ttgaactgct
2101 tattaaaaaa gtaaacatgt

Fig 6B

EPM2B protein sequence

MAAEASESGPALHELMREAEISLLECKVCFEKFGHRQQRRPRNLSCGHVV CLACVAALAHPRTLALECPFCRRACRGCDTSDCLPVLHLIELLGSALRQS PAAHRAAPSAPGALTCHHTFGGWGTLVNPTGLALCPKTGRVVVVHDGRRR VKIFDSGGGCAHQFGEKGDAAQDIRYPVDVTTTNDCHVVVTDAGDRSIKV FDFFGQIKLVIGGQFSLPWGVETTPQNGIVVTDAEAGSLHLLDVDFAEGV LRRTERLQAHLCNPRGVAVSWLTGAIAVLEHPLALGTGVCSTRVKVFSSS MQLVGQVDTFGLSLYFPSKITASAVTFDHQGNVIVADTSGPAILCLGKPE EFPVPKPMVTHGLSHPVALTFTKENSLLVLDTASHSIKVYKVDWG

Fig 7A

Promoter (5') sequence:

1	CCCCAAGGCC	CCCCCGGCCC	CCAGGCAACC	CCAGGCCCCC	AGGCAACCCA
51	AGGCCCCCG	GCCCCAAGCC	CCCCAGGTTC	CCGGCCCCAA	GAACCAAGCC
101	CCCCGGCCCC	CCGCCCCAG	CACCCAGCAC	CAAGCCCCCG	CCCCCGCCC
151	CAAGCACCCA	GCCCCAGCAC	CCAGCCCCCG	CCCCAGCCCC	AGCCCCAGCA
201	CCCAGCCCCC	GCCCCAGCAC	CCAGCCCCAG	CACCCAGCCC	CCGCCCCAGC
251	CCCAGCCCCC	GTCCCCCCC	CCAGCACCCA	GCCCCAGCCC	CAGCAGCAGC
301	ACCCAGCAGG	GGACTGCAAA	GCGTAGGCTA	CCCCAGGTGG	AACACCGTGT
351	TCTAGTTTTG	CTTTGCCGTT	TGCAGCCTGG	GCGATCGGGG	GCCACCGCTC
401	GAGCCTGTTT	CCCGTCGCGG	AAAGCGGAGC	CGCCCCGCCC	CGCCCCCGC
451	CTGCCTGAAG	GTCACGGGCC	TGGGCCTGCG	GCGCGCGGTG	CGGCCCGCGA
501	GCGTCCGCTC	CCGCGCCCTC	CGCAGTCAGC	GCCCGCCCGC	CCGCCGGGGG
5 51	ACCGCAGGCC	GCGGCCGAGA	GGCTGCGCGC	TGCGCCCGCG	ACGTCAGGCC
601	CCGCCCCGCC	CCGCCCGCC	CCGTGACCGG	CCCCGGCCCC	GGCCCCGGCC
651	CCGGCCCCGG	ACCGAGCGGC	GCCCGCGGGA	GCGGCGGCGG	CCGCGCG

Coding sequence:

ATG

701	GGGGCCGAAG	CGGCGGGGAG	CGGGCGGGCG	CTGCGGGAGC	TGGTGCGCGA
751				GTGCTTCGAG	
801	ACCGCCAGCA	GCGGCGCCCG	CGCAACcTGC	CCTGCGGCCA	CGTGGTGTGC
851	CTGGCCTGCG	TGGCGGCCCT	GGCGCACCCG	CGGACGCTGG	CCCTGGAGTG
901	CCCCTTCTGC	CGCCGGGCCT	GCCGCGGCTG	CGACACCAGC	GACTGCCTGC
951	CGGTGCTTCA	CCTCCTGGAG	CTCCTGGGCT	CGGCGCTGCG	CCCAGCCCCC
1001	GCCGCCCCC	GCGCCGCCCC.	CCGCGCCGCC	CCCTGCGCCC	CGGGCGCCCT
1051	CGCCTGCCAT	CACGCGTTCG	GAGGCTGGGG	GACCCTGGTC	AACCCCACGG
1101	GGCTGGCGCT	GTGCCCCAAG	ACCGGGCGGG	TCGTGGTGGT	GCACGACGGC
1151	AGGAGGCGGG	TCAAGATCTT	TGACTCCGGG	GGAGGATGCG	CCCATCAGTT
1201	TGGAGAGAAG	GGGGAGGCTG	CCCAGGACAT	TAGGTACCCC	CTGGACGTCG
1251	CCGTCACCAA	CGACTGCCAC	GTGGTTGTCA	CCGACGCCGG	CGACCGCTCC
1301	ATCAAAGTGT	TTGATTTCTT	TGGCCAGATC	AAGCTCGTCA	TTGGAGACCA
1351	GTTTTCCTTA	CCTTGGGGCG	TGGAGACCAC	CCCTCAGAAT	GGGGTCGTGG
1401	TAACTGACGC	CGAGGCAGGG	TCGCTGCACC	TGCTGGAAGT	CGACTTTGCA
1451	GAAGGAGCCC	TCCAGAGGAC	TGAAAAGCTG	CAAGGTCATC	TGTGCAACCC
1501	GCGAGGGGTG	GCCGTGTCCT	GGCTCACTGG	GGCCATTGCG	GTCCTGGAGC
1551			GGGGCGGCA	GCACCGCCGT	GAAGGTGTTC
1601	AGCCCAACTA		CGGCCAGGTG		GGCTCAGCCT
1651	CTTTTTCCCC	TCTAGAATAA	CCGCCTCCGC	CGTGACCTTT	GATCACCAGG
1701				AGGCCGTCCT	
1751				ATCATCACCC	
1801				GAATTCTCTT	
1851	ACAGTGCAGC	CCATTCCGTA	AAAGTCTACA	AGGCTGACTG	GGGGTAA

Fig 7A (cont'd)

3' UTR:

	TGG				
1901	GGTGTGGTGG	GGGTCCTGGA	ACTGCCACTA	ATCCAGTTTA	ACCCTGGATG
1951	AATTAATCCC	ATCTCTCGAA	CGGGGATCAT	TATAACTGCC	
2001	ATAAAGGTTG	AAGGTAATTA	TTAAAGAATA	ATAATGAAGT	CTACCGTTTA
2051	TTGAGTTATG	TGCTCCCTGT	GCTAGGAAAC	TTTGCAAATA	TTAGCTCAGC
2101		AGTGGTACCC	AGGGAGGTAA	TGCCCATCAT	TAATCCCATT
2151	TTAGAGATGA	GAAAACTGAG	ACCCGAGGGT	TTAAGTGATT	CTCTGAAGGT
2201	CATGTTTACT	TACTGTGACA	GTCACAATGG	GAACTCTATT	CTGACTCCCC
2251	AATCCCTTGC	TCCTAAGTAG	GATAACAGAT	GTGAGAAAAC	GACAGCATGT
2301	GTCTATATGT	TGTTACTGTG	TGTACTCTCT	TTACAGGTAG	CTATTTCTCT
2351	TGGTTGGACG	TGCAGAGAAA	GGAGACTTTC	TAGAGAGTTC	AAGAGGAAAA
2401	AGGGTAGTGT	GATGAGCATG	GACGTGAGTG	TCATTGAACT	TGCTGGTTCT
2451	TTGATGTCAC	AGTAGGTAGA	ATGACTGTGG	ATCCTTCAAC	TGCCCTTGGG
2501	AAAGGTAAAC	ATGTCTGTTG	GGACCTGGAT	GTCCTCCATC	ATAGGAACCC
2551	AGGAAATACT	AGTTGGTTGC	TGCAGAAAGG	CTTGTGTGGA	CATAAGTTCA
2601	AAACTACTGC	CGACCACCGT	ACATTCACAC	ACCTCCAGTG	GGAGATGGCT
265 1	GGAAGACAGT	CCTGTGACAG	GTCTGCATTC	ATAGAACAAG	ANGCCGCCAC
27 01	CGTTGGTTCA	CGGCAGAATG	AGTTTGCCTG	CCTCTTCATA	ATCTGTGNCN
2751	ACCCGAAACC	CTTTTGTGAT	AGAGTTTTC	TCTGTGCCAT	TTNAATTTGT
280 1	CCCATTGCAC	ACACTGTTTT	CCCCTAACCA	GCTCCCTTGA	TGCTNAGCTA
2851	GCATTTAGGC	CACTGGTAAA	CCCCTGTATA	CTTCTTGAGT	TGAAGTTAAG
2901	CTTTGACCCA	GATAANGNCT	GCTTTAATAC	NTGCAGTCGA	NTGGACCGAA
2951	TAAGGGGGAA	ATTTCAGGTG	AGGTGGCCGG	GTTCTTTATN	AACCGGTTTT
3001	GGTTTGTA				•

Fig 7B

Met Gly Ala Glu Ala Ala Gly Ser Gly Arg Ala Leu Arg Glu Leu Val 1 ' 5 10 15

Arg Glu Ala Glu Val Ser Leu Leu Glu Cys Lys Val Cys Phe Glu Arg
20 25 30

Phe Gly His Arg Gln Gln Arg Arg Pro Arg Asn Leu Pro Cys Gly His 35 40 45

Val Val Cys Leu Ala Cys Val Ala Ala Leu Ala His Pro Arg Thr Leu 50 55 60

Ala Leu Glu Cys Pro Phe Cys Arg Ala Cys Arg Gly Cys Asp Thr 65 70 75 80

Ser Asp Cys Leu Pro Val Leu His Leu Leu Glu Leu Leu Gly Ser Ala 85 90 95

Leu Arg Pro Ala Pro Ala Ala Pro Arg Ala Ala Pro Arg Ala Ala Pro 100 105 110

Cys Ala Pro Gly Ala Leu Ala Cys His His Ala Phe Gly Gly Trp Gly 115 120 125

Thr Leu Val Asn Pro Thr Gly Leu Ala Leu Cys Pro Lys Thr Gly Arg 130 135 140

Val Val Val His Asp Gly Arg Arg Val Lys Ile Phe Asp Ser 145 150 155 160

Gly Gly Gly Cys Ala His Gln Phe Gly Glu Lys Gly Glu Ala Ala Gln 165 170 175

Asp Ile Arg Tyr Pro Leu Asp Val Ala Val Thr Asn Asp Cys His Val 180 185 190

Val Val Thr Asp Ala Gly Asp Arg Ser Ile Lys Val Phe Asp Phe Phe 195 200 205

Gly Gln Ile Lys Leu Val Ile Gly Asp Gln Phe Ser Leu Pro Trp Gly 210 215 220

Fig 7B (cont'd)

Val 225	Glu	Thr	Thr	Pro	Gln 230	Asn	Gly	Val	Val	Val 235	Thr	Asp	Ala	Glu	Ala 240
Gly	Ser	Leu	His	Leu 245	Leu	Glu	Val	Asp	Phe 250	Ala	Glu	Gly	Ala	Leu 255	Glr
Arg	Thr	Glu	Lys 260	Leu	Gln	Gly	His	Leu 265	Cys	Asn	Pro	Arg	Gly 270	Val	Ala
Val	Ser	Trp 275	Leu	Thr	Gly	Ala	Ile 280	Ala	Val	Leu	Glu	His 285	Pro	Pro	Gly
Leu	Gly 290	Ala	Gly	Ala	Gly	ser 295	Thr	Ala	Val	Lys	Val 300	Phe	Ser	Pro	Thi
Met 305	Gln	Leu	Ile	Gly	Gln 310	Val	Asp	Thr	Phe	Gly 315	Leu	Ser	Leu	Phe	Phe 320
Pro	Ser	Arg	Ile	Thr 325	Ala	Ser	Ala	Val	Thr 330	Phe	Asp	His	Gln	Gly 335	Asr
Val	Ile	Val	Ala 340	Asp	Thr	Ser	Ser	Gln 345	Ala	Val	Leu	Суз	Leu 350	-	Glī
Pro	Glu	Glu 355	Phe	Pro	Val	Leu	Lys 360	Pro	Ile	Ile	Thr	His 365	Gly	Leu	Sei
His	Pro 370	Val	Ala	Leu	.Thr	Phe 375	Thr	ГЛЗ	Glu	Asn	Ser 380	Leu	Leu	Val	Let
Asp 385	Ser	Ala	Ala	His	Ser 390	Val	Lys	Val	Tyr	Lys 395	Ala	Asp	Trp	Gly	

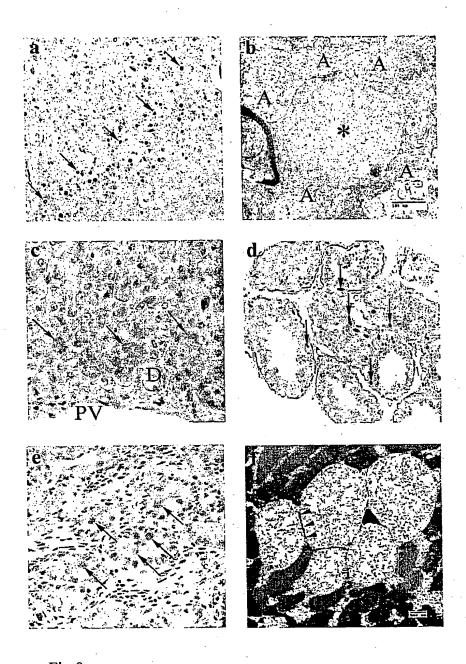


Fig 8

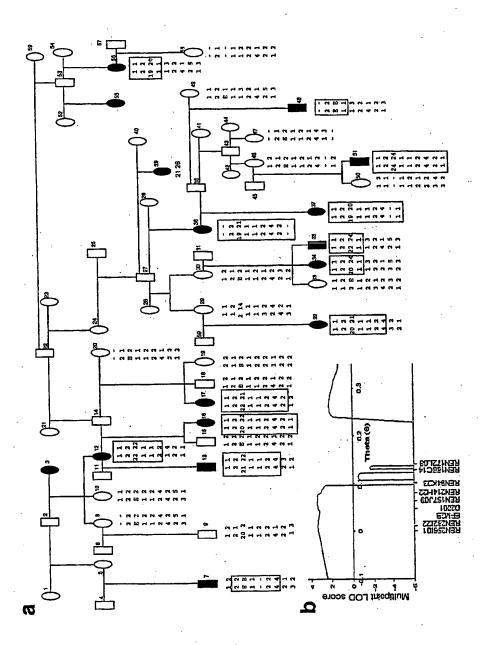


Fig 9

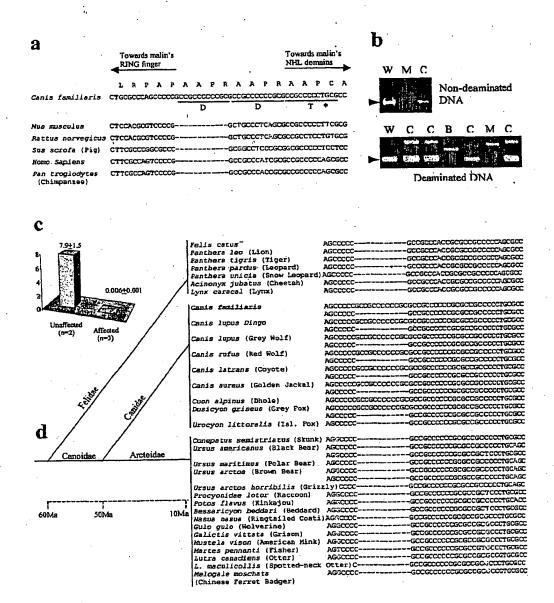


Fig 10